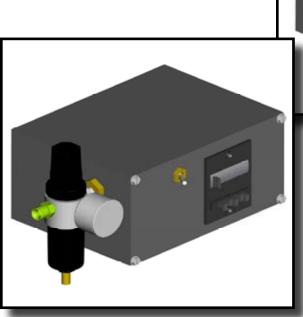
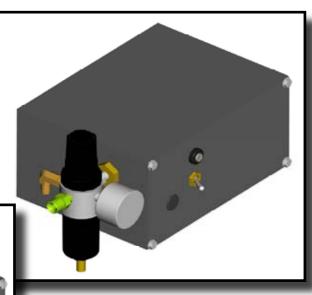




Probler P₂ Delayed Air Purge / Dispense Counter

Guardian Series Options







5845 WEST 82ND STREET INDIANAPOLIS, INDIANA 46278 U.S.A.

Phone (317) 875-5592 Fax (317) 875-5456

Email gcisales@glascraft.com Web www.glascraft.com







Table Of Contents

About This Manual	1
Parts & Illustrations Standard & Optional Equipment	
Safety Urethane Safe Handling and Use of Foam Equipment	10
Installation	
Optional Guardian Mount Installation Delayed Air Purge Gun Installation Delayed Air Purge Installation Dispense Counter Gun Installation Dispense Counter Installation	
Operation Initial Start-up Procedures	24
Notes	25
Limited Warranty Policy	27
Technical Assistance	28
For Your Reference	INSIDE BACK COVER

Introduction

About This Manual

Before operating, maintaining or servicing any GlasCraft system, read and understand all of the technical and safety literature provided with GlasCraft products. If you do not have the proper or related manuals and safety literature for your GlasCraft system, contact your GlasCraft distributor or GlasCraft, Inc.

In this **GlasCraft** technical and safety publication, the following advisories will be provided where appropriate:

NOTE

Is information about the procedure in progress.

CAUTION

Is imperative information about equipment protection.

WARNING

Is imperative information about personal safety.

The information in this document is intended only to indicate the components and their normal working relationship typical use. Each assembly should be directed by a **GlasCraft** distributor or made from the **GlasCraft** assembly instructions provided.

This manual provides information for the assembly, operation, maintenance and service of this **GlasCraft** product as used in a typical configuration. While it lists standard specifications and procedures, some deviations may be found.

In order to provide our users with the most up-to-date technology possible, we are constantly seeking to improve products. If technological change occurs after a product is on the market, we will implement that technology in future production and, if practical, make it available to current users as a retrofit, up-date or supplement. If you find some discrepancy between your unit and the available documentation, contact your GlasCraft distributor to resolve the difference. GlasCraft, Inc. reserves the right to change or modify this product as it deems necessary.

Careful study and continued use of this manual will provide a better understanding of the equipment and process, resulting in more efficient operation, longer trouble-free service and faster, easier troubleshooting.

Parts & Illustrations

Model - Delayed Air Purge

Standard Equipment		
23996-00	DELAYED AIR PURGE ASSEMBLY	
GC-1409	USER MANUAL	

Model - Dispense Counter

Standard Equipment		
23997-00	DISPENSE COUNTER	
GC-1409	USER MANUAL	

Mounting Options

Optional Equipment		
23949-00	GUARDIAN SERIES MOUNTING BRACKET KIT	

Component Features

DELAYED AIR PURGE FEATURES

The control box receives a signal from the gun, once the signal is received the air purge is shut off via the Air Purge control Valve (APCV), this valve is held in with the Delay Spool Valve (DSV). When the trigger is released the gun signal is cancelled to the DSV, the DSV then begins to count down to reset mode, once complete the APCV is reset and air purge resumes.

The DSV is adjustable up to 15 seconds of delay. Factory set point is 2 seconds. To adjust the time delay of the DSV, remove the plug #7279-09 from cover. Use a small flat head screw driver, turn clock wise to increase delay time, counter clock wise to decrease delay.

The operator is responsible for recognizing the air purge delay time verses gel time of the materials being processed with this equipment to ensure the gun does not prematurely set up. The Red eye on the front panel indicates when the APCV is open, allowing air purge to the gun. The on/off switch will by-pass the signal air to the DSV, allowing the gun to be operated normally with out the delay action of air purge.

DISPENSE COUNTER FEATURES

The control box receives a signal when the gun trigger is activated, to activate the timer, the timer counter receives signal from the change over switches. Pneumatic drive systems use a 3 way check valve and receive signal from both upper and lower switches, making the timer a "stroke counter". Hydraulic drive systems use a single signal, typically to the lower signal switch, making the timer a "cycle counter".

When the predetermined count is reached the timer activates the bimba cylinder in the back of the gun to overcome the trigger at the gun, the operator will need to recognize this "feel" of the trigger and release the trigger.

When the gun trigger is released the signal air is cancelled to a delay spool valve (DSV) located in box assembly. The DSV delays the reset of the counter for 3 seconds.

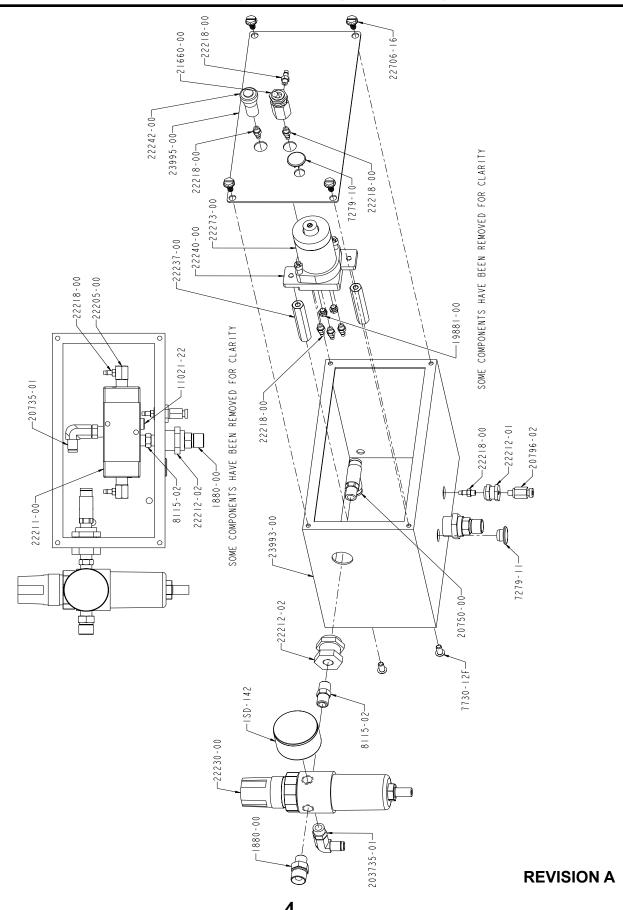
The timer will reset to the set point and cancel the air to the actuation cylinder.

The on/off switch will by-pass the counter signal allowing the system to operated independent of the counter.

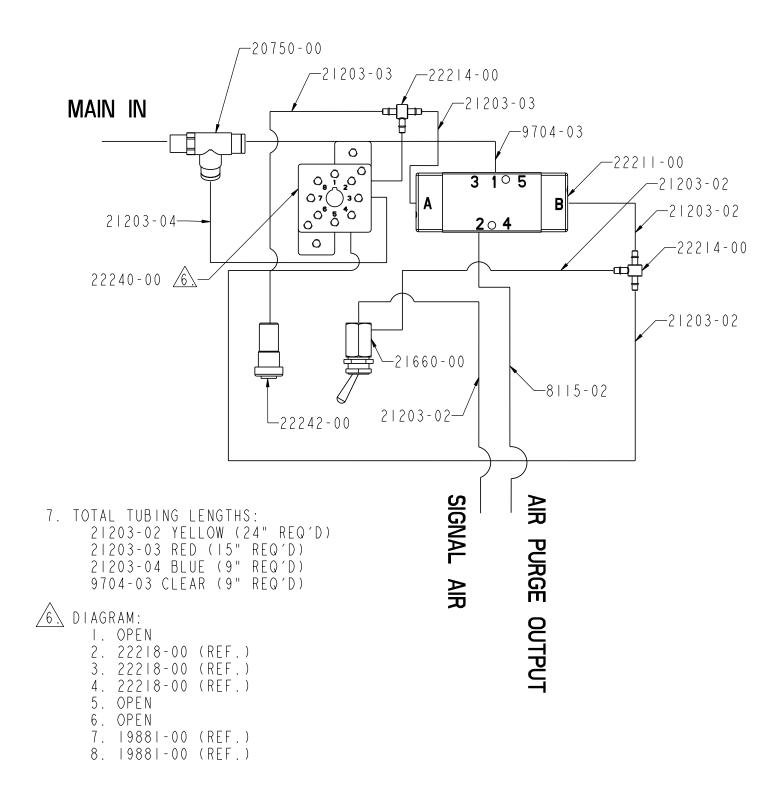
COUNTER CALCULATIONS

Stroke output = .021 gallon Cycle output = .042 gallons

23996-00 Delayed Air Purge Assembly



23996-00 Delayed Air Purge Assembly

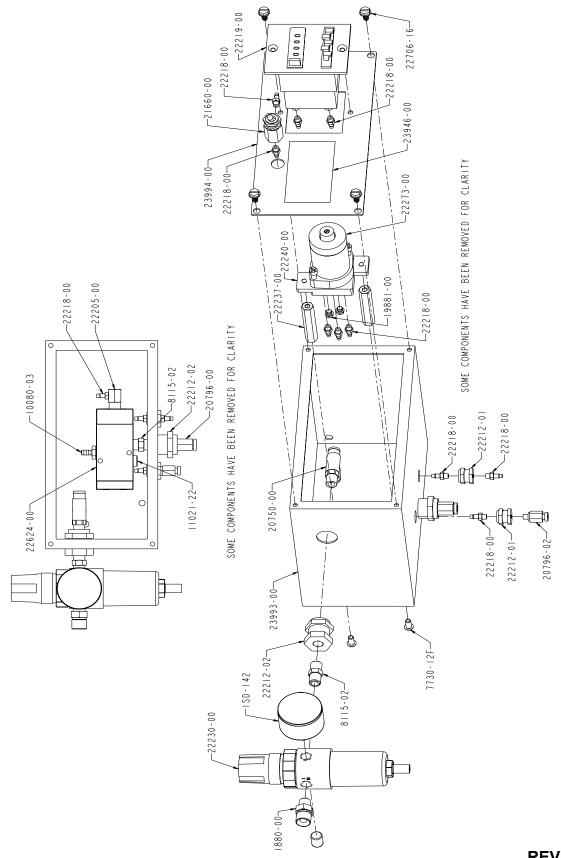


REVISON A

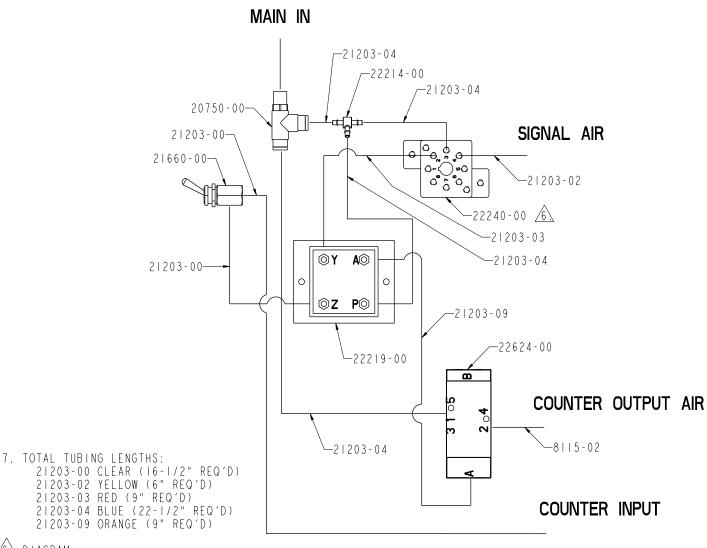
23996-00 Delayed Air Purge Parts List

Part Number	Description	Qty.
11021-22	PIPE PLUG	1
1880-00	HOSE FITTING	2
19881-00	PLUG FITTING	2
20735-01	ELBOW FITTING	2
20750-00	SWIVEL TEE	1
20796-02	FITTING	1
21660-00	CONTROL VALVE	1
22205-00	"L" FITTING	2
22211-00	SPOOL VALVE	1
22212-01	BULKHEAD FITTING	1
22212-02	BULKHEAD FITTING	2
22218-00	PUSH-ON HOSE FITTING	9
22230-00	REGULATOR FILTER	1
22237-00	HEX STANDOFF	2
22240-00	VALVE MOUNTING PLATE	1
22242-00	PRESSURE INDICATOR	1
22273-00	DELAY VALVE	1
22706-16	SCREW	4
23947-00	DELAYED AIR PURGE KIT	1
23993-00	DELAY/TIMER BOX	1
23995-00	DELAY BOX COVER	1
7279-10	SNAP-IN HOLE PLUG	1
7279-11	SNAP-IN HOLE PLUG	1
7730-12F	SCREW	2
8115-02	FITTING	2
ISD-142	SOLVENT POT GAUGE	1

23997-00 Dispense Counter Assembly



23997-00 Dispense Counter Assembly



6. DIAGRAM:

- I. OPEN
- 2. 22218-00 (REF.) 3. 22218-00 (REF.) 4. 22218-00 (REF.) 5. OPEN

- 6. OPEN
- 7. 19881-00 (REF.)
- 8. 19881-00 (REF.)

23997-00 Dispense Counter Parts List

Part Number	Description	Qty.
10080-03	BARB HOSE FITTING	1
11021-22	PIPE PLUG	1
1880-00	FITTING	1
19881-00	PLUG FITTING	2
20750-00	SWIVEL TEE	1
20796-00	FITTING	1
20796-02	FITTING	1
21660-00	CONTROL VALVE	1
22205-00	"L" FITTING	1
22212-01	BULKHEAD FITTING	2
22212-02	BULKHEAD FITTING	2
22218-00	PUSH-ON HOSE FITTING	13
22219-00	PREDETERMINING COUNTER	1
22230-00	REGULATOR FILTER	1
22237-00	HEX STANDOFF	2
22240-00	VALVE MOUNTING PLATE	1
22273-00	DELAY VALVE	1
22624-00	SPOOL VALVE	1
22706-16	SCREW	4
23948-00	DISPENSE COUNTER KIT	1
23993-00	DELAY/TIMER BOX	1
23994-00	TIMER BOX COVER	1
7730-12F	SCREW	2
8115-02	FITTING	2
ISD-142	SOLVENT POT GAUGE	1

Safe Handling And Use Of Urethane Foam **Equipment**

Introduction

Any tool, if used improperly, can be dangerous. Safety is ultimately the responsibility of those using the tool. In like manner, safe operation of polyester processes is the responsibility of those who use such processes and those who operate the equipment. This manual outlines procedures to be followed in conducting polyester operations safely.

All personnel involved in dispensing operations should read and understand this manual. It is most important that equipment operators, maintenance, and supervisory personnel understand the requirements for safe operation.

This manual cannot answer every circumstance; each user should examine his own operation, develop his own safety program and be assured that his equipment operators follow correct procedures. GlasCraft hopes that this manual is helpful to the user and recommends that the precautions in this manual be included in any such program.

Urethane foam systems are comprised of several different chemical compounds, some of which may be hazardous if improperly used.

CAUTION

Particular caution must be taken with respect to the vapors released during the use of urethane foam systems.

Isocyanate compounds are used in urethane foaming operations. The medical history of persons who may be exposed to such isocyanates should be examined. It is recommended that individuals with a history of chronic respiratory ailments should avoid exposure to all isocyanates.

In addition to the manual, GlasCraft recommends that the user consult the regulations established under the Occupational Safety & Health Act (OSHA), particularly the following sections:

- 1910.94 Pertaining to ventilation.
- 1910.106 Pertaining to flammable liquids.
- 1910.107 Pertaining to spray finishing opera tions, particularly Paragraph (m)

Organic Peroxides and Dual Component Coatings. Local codes and authorities also have standards to be followed in the operation of your spraying equipment. Chemical manufacturer's recommendations should be obtained and considered. Your insurance carrier will be helpful in answering questions that arise in your development of safe procedures.

Personnel Safety Equipment

GlasCraft recommends the following Personal Safety Equipment for conducting safe operations of the Polyester Systems:









PROTECTION

GlasCraft recommends that the user consult the state and local regulations established for all Safety equipment listed.

Operating Safely

In operating urethane foam equipment safely, user should make every effort to:

- 1. Handle chemicals safely.
- 2. Provide adequate ventilation.
- Provide adequate safety equipment (gloves, respirators, safety glasses, protective clothing, etc.) for operators and all others working in areas where they may be exposed to the chemicals or their vapors.
- Avoid operating equipment which has given any 4. indication of malfunction.
- Become fully acquainted with the equipment and chemicals used.

Handling Chemicals Safely

Storage of polyisocyanates, diamines, and organic solvents should be isolated and restricted to specially constructed storage rooms. Store chemicals in original containers and according to manufacturer's recommendations listed on the container. Maximum ambient temperatures to which such chemicals should be exposed are specified by the manufacturer and MUST NOT be exceeded either in the storage area or in the spraying or pouring area.

To avoid moisture contamination, do not open containers until ready for use. After use, the remaining material should be re-sealed in the original container and stored in areas away from moisture.

During clean-up of spilled isocyanate component, respirators, gloves and eye protection must be worn. Isocyanates which have been spilled can be controlled by covering them with dry sawdust and/or other absorbent, inert materials. Care should be taken to avoid skin contact. The absorbent material and the absorbed isocyanate should be collected promptly, placed in an open-top container, and treated with dilute solutions of ammonium hydroxide and/or alcohol. While being treated in this manner, the material should be in an adequately ventilated area. Clothing on which any material has been spilled should be removed immediately, and cleaned before being worn again.

Clean-Up Solvents

WARNING

A hazardous situation may be present in your pressurized fluid system!

Halogenated Hydrocarbon Solvents can cause an explosion when used with aluminum or galvanized components in a closed (pressurized) fluid system (pumps, heaters, filters, valves, spray guns, tanks, etc.).

The explosion could cause serious injury, death and/or substantial property damage.

Cleaning agents, coatings, paints, etc. may contain Halogenated Hydrocarbon Solvents.

Some GlasCraft spray equipment includes aluminum or galvanized components and will be affected by Halogenated Hydrocarbon Solvents.

There are three key elements to the Halogenated Hydrocarbon (HHC) solvent hazard.

- 1. **The presence of HHC solvents.** 1,1,1-Trichloro ethane and Methylene Chloride are the most common of these solvents. However, other HHC solvents are suspect if used; either as part of paint or adhesives formulation, or for clean-up or flushing.
- 2. **Aluminum or Galvanized Parts.** Most handling equipment contains these elements. In contact with these metals, HHC solvents could generate a corrosive reaction of a catalytic nature.

3. Equipment capable of withstanding pressure. When HHC solvents contact aluminum or galvanized parts inside a closed container, such as a pump, spray gun, or fluid handling system, the chemical reaction can, over time, result in a build-up of heat and pressure, which can reach explosive proportions.

When all three elements are present, the result can be an extremely violent explosion. The reaction can be sustained with very little aluminum or galvanized metal: any amount of aluminum is too much.

The reaction is unpredictable. Prior use of an HHC solvent without incident (corrosion or explosion) does NOT mean that such use is safe. These solvents can be dangerous alone (as a clean-up or flushing agent) or when used as a component of a coating material. There is no known inhibitor that is effective under all circumstances. Furthermore, the mixing of HHC solvents with other materials or solvents, such as MEK, alcohol, and toluene, may render the inhibitors ineffective.

The use of reclaimed solvents is particularly hazardous. Reclaimers may not add any inhibitors, or may add incorrect amounts of inhibitors, or may add improper types of inhibitors. Also, the possible presence of water in reclaimed solvents could feed the reaction.

Anodized or other oxide coatings cannot be relied upon to prevent the explosive reaction. Such coatings can be worn, cracked, scratched, or too thin to prevent contact. There is no known way to make oxide coatings or to employ aluminum alloys, which will safely prevent the chemical reaction under all circumstances.

Several solvent suppliers have recently begun promoting HHC solvents for use in coating systems. The increasing use of HHC solvents is increasing the risk. Because of their exemption from many State Implementation Plans as Volatile Organic Compounds (VOC's), their low flammability hazard, and their not being classified as toxic or carcinogenic substances, HHC solvents are very desirable in many respects.

WARNING

If you are now using Halogenated Hydrocarbon solvents in pressurized fluid systems having aluminum or galvanized wetted parts,

IMMEDIATELY TAKE THE FOLLOWING STEPS:

Empty system, shut-off, completely depressurize in accordance with equipment service instructions.

• Remove equipment from service, disassemble in accordance with equipment servicing instructions.

Inspect all parts for corrosion and/or wear. Replace any damaged parts.

Thoroughly clean all parts of the equipment with a non-halogenated solvent and reassemble in accordance with equipment servicing instructions.

Flush equipment with non-halogenated solvent.

 Do NOT reuse equipment with HHC solvents or with materials containing such solvents.

Material suppliers and/or container labels should be consulted to ensure that the solvents used are compatible with your equipment.

NOTE

GlasCraft is aware of NO stabilizers available to prevent Halogenated Hydrocarbon solvents from reaction under all conditions with aluminum components in a closed fluid system.

TAKE IMMEDIATE ACTION...

Halogenated Hydrocarbon solvents are dangerous when used with aluminum components in a closed fluid system.

Consult your material supplier to determine whether your solvent or coating contains Halogenated Hydrocarbon Solvents.

GlasCraft recommends that you contact your solvent supplier regarding the best non-flammable clean-up solvent with the heat toxicity for your application.

If, however, you find it necessary to use flammable solvents, they must be kept in approved, electrically grounded containers.

Bulk solvent should be stored in a well-ventilated, separate building, 50 feet away from your main plant.

You should allow only enough solvent for one day's use in your laminating area.

"NO SMOKING" signs must be posted and observed in all areas of storage or where solvents and other flammable materials are used.

Adequate ventilation (as covered in OSHA Section 1910.94 and NFPA No. 91) is important wherever solvents are stored or used, to minimize, confine and exhaust the solvent vapors.

Solvents should be handled in accordance with OSHA Section 1910.106 and 1910.107.

Toxicity of Chemicals

GlasCraft recommends that you consult OSHA Sections 1910.94, 1910.106, 1910.107 and NFPA No. 33, Chapter 14, and NFPA No. 91.

Contact your chemical supplier(s) and determine the toxicity of the various chemicals used, as well as the best methods to prevent injury, irritation and danger to personnel.

Also determine the best methods of first aid treatment for each chemical used in your plan

First Aid

If chemicals containing isocyanate are splashed on the skin, they can produce ill effects. Steps to counteract such effects should be started immediately.

Apply Tincture of Green Soap, full strength, to the contaminated area. If Tincture of Green Soap is not immediately available, wash the exposed area repeatedly with soap and water. Soap and water is not as desirable as using Tincture of Green Soap because many isocyanate components are not easily dissolved in water. In addition, soap and water does not form a barrier to the isocyanate.

After approximately two to four minutes, wash off the Tincture of Green Soap with water. If there is still an indication of isocyanate present, repeat the application. If the isocyanate contamination is on the facial area, care must be taken to avoid getting the Tincture of Green Soap in the eyes.

If the person develops breathing difficulties, oxygen should be administered. Quite often the exposed person will experience residual effects such as coughing spells. CONTACT PHYSICIAN IMMEDIATELY.

WARNING

Contact a doctor immediately in the event of an injury and give him the information you have collected. If your information includes first aid instructions, administer first aid immediately while you are contacting the doctor.

If a person accidentally swallows isocyanate, large amounts of water should be swallowed immediately. Vomiting should then be induced by patient sticking his finger down his throat, or by swallowing large quantities of warm salt water or warm soapy water. After vomiting, more water should be taken to dilute isocyanate further. CONTACT PHYSICIAN IMMEDIATELY.

Ventilation

WARNING

Hazardous concentrations of some chemical vapors exist before they can be smelled. Chemical component suppliers should be contacted to determine at what concentrations the vapors of the chemicals they supply become dangerous, and the procedures and equipment needed to detect such dangerous concentrations. Such equipment should be obtained.

Adequate ventilation must be provided in any area where foam chemicals are sprayed or poured, and wherever the material containers are opened.

In industrial applications, foaming operations should be restricted to specific areas, and proper ventilation should be provided in these areas to prevent chemical vapors from spreading. Spray foaming operations MUST be restricted to a spray booth where a minimum exhaust of 100 feet per minute at the face of the booth is provided. Special care should be taken to prevent unsuspecting personnel both inside and outside of the plant from being exposed to chemical vapors. The chemical vapors should be exhausted to atmosphere in such a manner and at a sufficiently low concentration that personnel outside the plant are not exposed to dangerous concentrations of chemical vapors. Refer to OSHA Standards, sub-part G, 1910.107 and particularly sub-section (m) for Federal standards. State and local authorities may have applicable statutes or regulations concerning ventilation.

In contractor applications (for example, at a construction site, inside building or other enclosed space), the forced ventilation normally provided is likely to be inadequate. These applications, therefore, usually REQUIRE the use of forced, fresh air respirators for all persons in the areas where foaming operations are conducted or where the chemical vapors are likely to spread.

In industrial and contractor applications, it is advisable to run frequent tests to determine the exact concentration of isocyanate vapor in the air. Industrial equipment is available for making such determinations. Your chemical supplier can recommend such equipment and procedures.

Proper Safety Equipment

All persons spraying or working is areas where forced air ventilation is not adequate to remove isocyanate vapors from the air MUST use an approved (U.S. Bureau of Mines) fresh air supplied respirator.

Respirators should be regularly inspected, cleaned and disinfected according to good practices. Records must be kept of the inspections. The user MUST have a medical clearance indicating that he can safely use a respirator.

Respirators must fit securely; beards prevent a tight seal around the face. Eye glasses have to be given special attention and contact lenses are prohibited.

Safety goggles, gloves and other protective devices are suggested for operators of foaming equipment. Refer to OSHA Standards, sub-part 1, 1910.132, 1910.133 and 1910.134 for Federal standards.

IF YOU HAVE ANY QUESTIONS REGARDING THE ABOVE PRECAUTIONS OR ANY SERVICE OR OPERATION PROCEDURES, CALL YOUR GLASCRAFT DISTRIBUTOR OR GLASCRAFT, INC.

NOTICE

All statements, information and data given herein are believed to be accurate and reliable but are presented without guaranty, warranty or responsibility of any kind expressed or implied. The user should not assume that all safety measures are indicated or that other measures are not required.



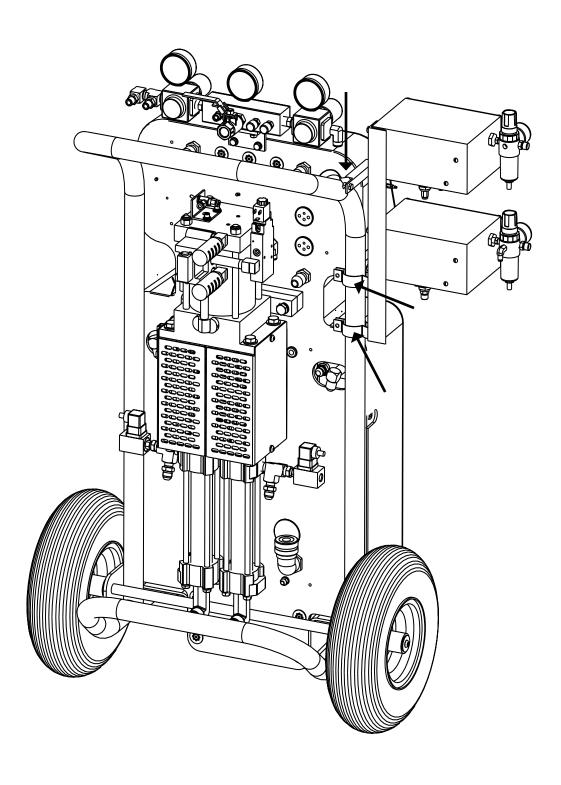
5845 WEST 82nd STREET, SUITE 102 INDIANAPOLIS, INDIANA 46278 U.S.A.

PHONE (317) 875-5592

FAX (317) 875-5456

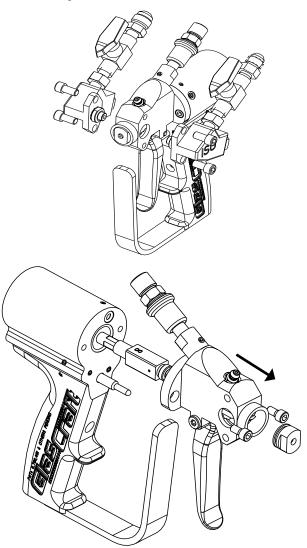
Optional Guardian Mount Installation

1. Install the mounting bracket #23949-00 by securing the band clamps to the frame as shown.

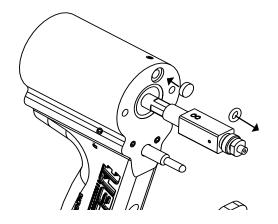


Delayed Air Purge Gun Installation

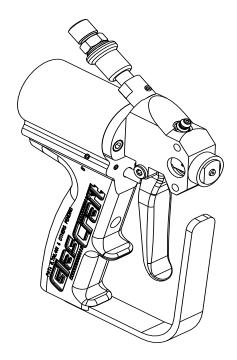
1. Remove the side blocks, air cap #23961-00, and nose of gun



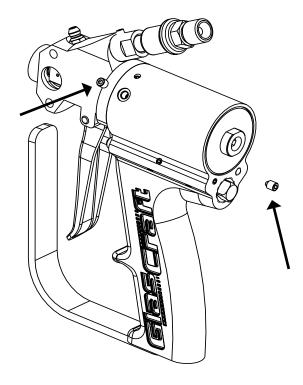
2. Remove o-ring #7554-06 from handle and install plug #23998-00



3. Re-install nose and air cap

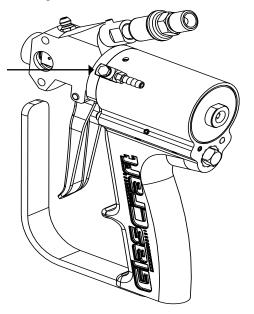


- **4.** Remove the two 10-32 plugs (#9936-08F) from gun handle
 - a. Back right of handle
 - b. Top left of barrel

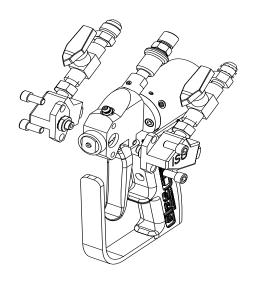


Delayed Air Purge Gun Installation

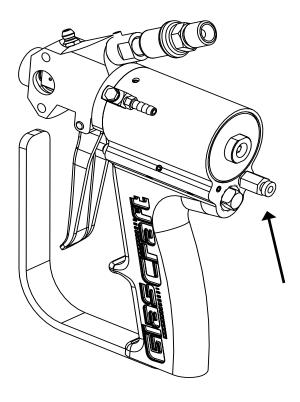
5. Install RS-143 & 10080-01 on the top of the gun barrel, the #9704-03 air trigger tubing connects to this fitting.



7. Reinstall side blocks after initial system start up is complete.



6. Install 20796-02 on the back right port, the 20732-04 signal air tubing connects to this fitting.



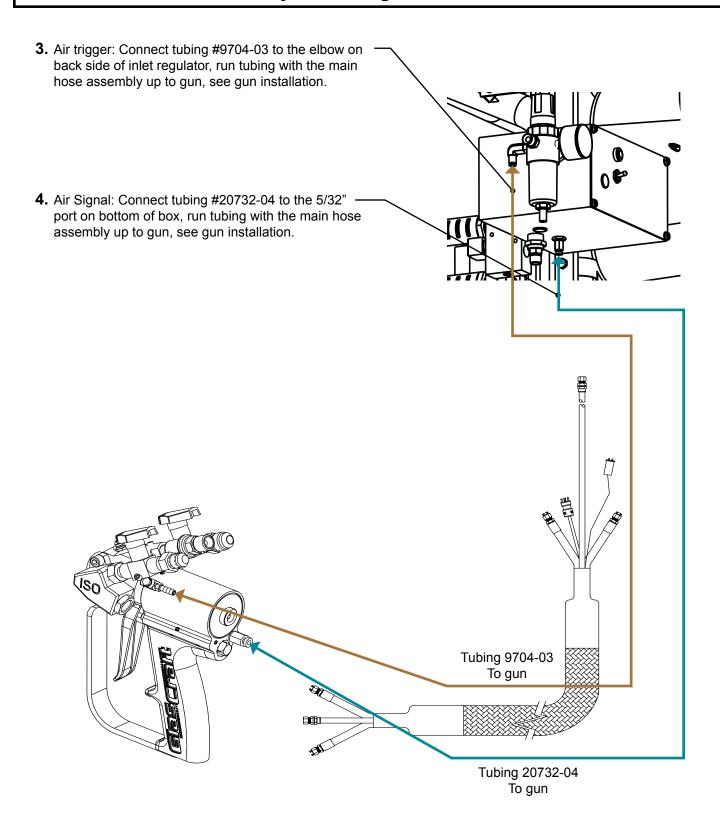
Delayed Air Purge Installation

The box can be remote mounted to the operators discretion, bracket kit #23949-00 allows both the Delay box and timer box to be mounted to Guardian series systems.

HOSES 1. Main air: Connect air hose #19507-03 from an accessory port on the Guardian air manifold, or line source to the air inlet regulator #22230-00 2. Air Purge: Connect air hose #19507-02 from lower -1/4" nps fitting on box assembly to main hose assembly air line (going to gun)

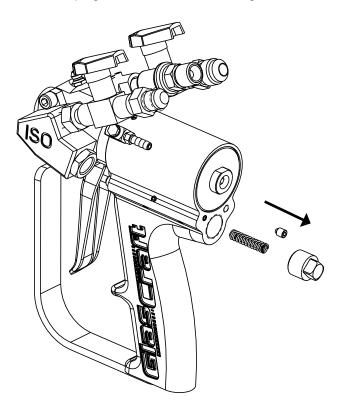
17

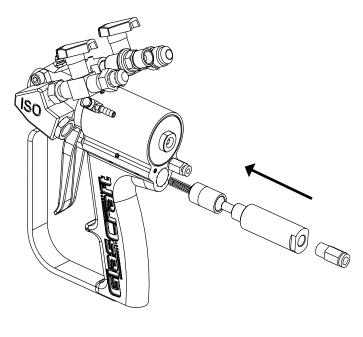
Delayed Air Purge Installation



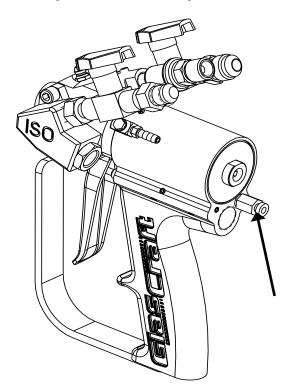
Dispense Counter Gun Installation

- **1.** Remove trigger plug #23967-00, spring #PG-19, and 10-32 plug #9936-08F from back of gun.
- **3.** Install #19938-00 spring, # 19937-01 cylinder adapter, # 19936-00 cylinder, #20796-00 fitting. The #9704-03 actuator tubing connects to this fitting.





2. Install # 20796-02 in 10-32 port, the 20732-04 signal air tubing connects to this fitting

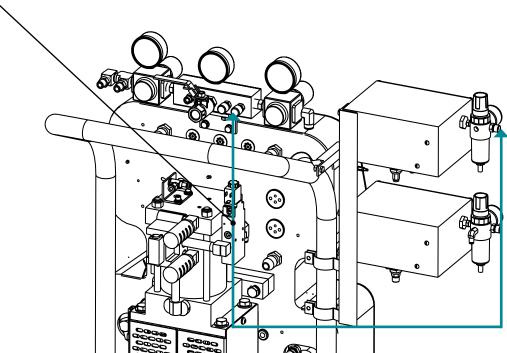


Dispense Counter Installation

The box can be remote mounted to the operators discretion, bracket kit #23949-00 allows both the Delay box and timer box to be mounted to Guardian series systems.

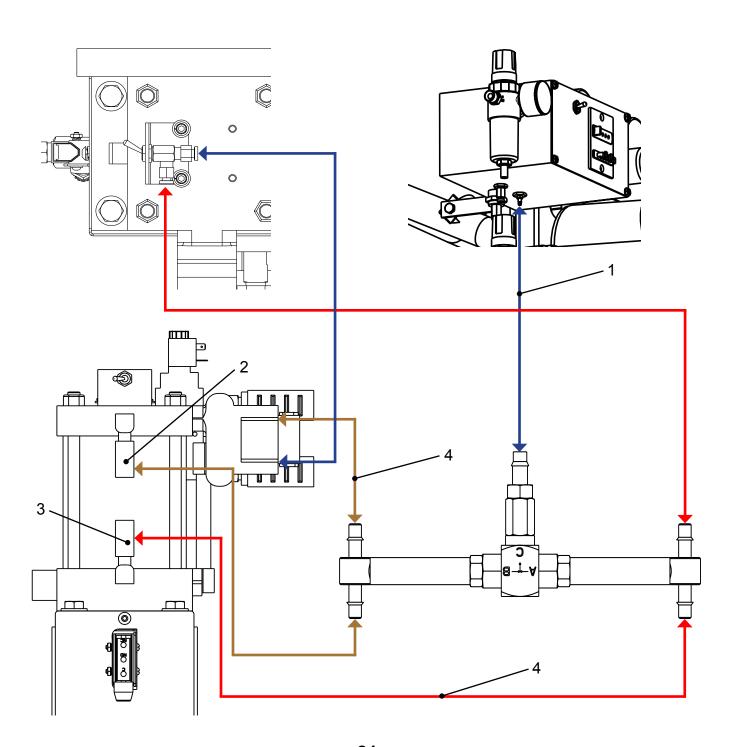
HOSES

1. Main air: Connect #19507-03 from accessory port of Guardian air manifold, or line source to inlet regulator #22230-00.



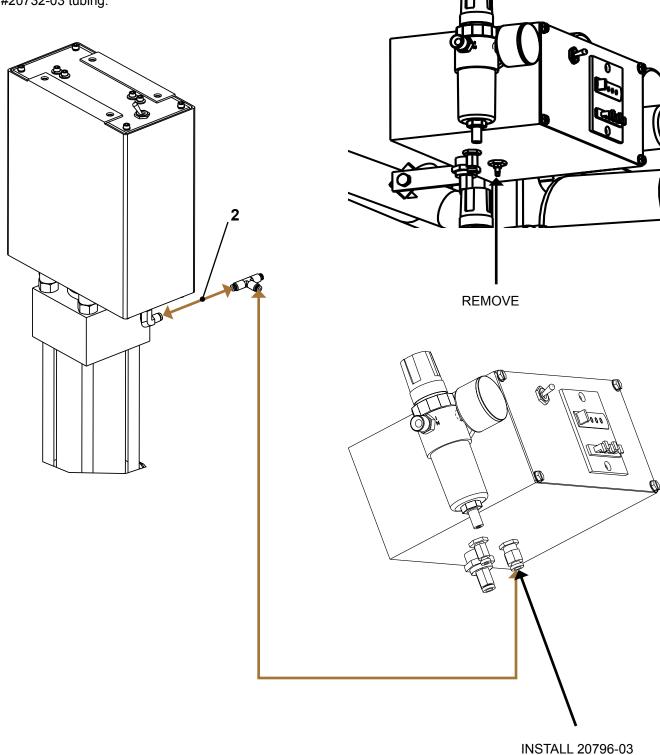
Pneumatic Unit Installation

- **1.** Counter input: Connect #21203-00 from barb fitting on the bottom of control the box to the drive cylinder switches. See signal switch paragraph.
- 2. locate upper signal tubing (clear) and cut line 1 ½" from signal valve.
- **3.** Locate lower signal tubing (blue) and cut line 1 ½" from signal valve.
- **4.** Install counter stroke signal tee sub-assembly, in line of each signal valve line

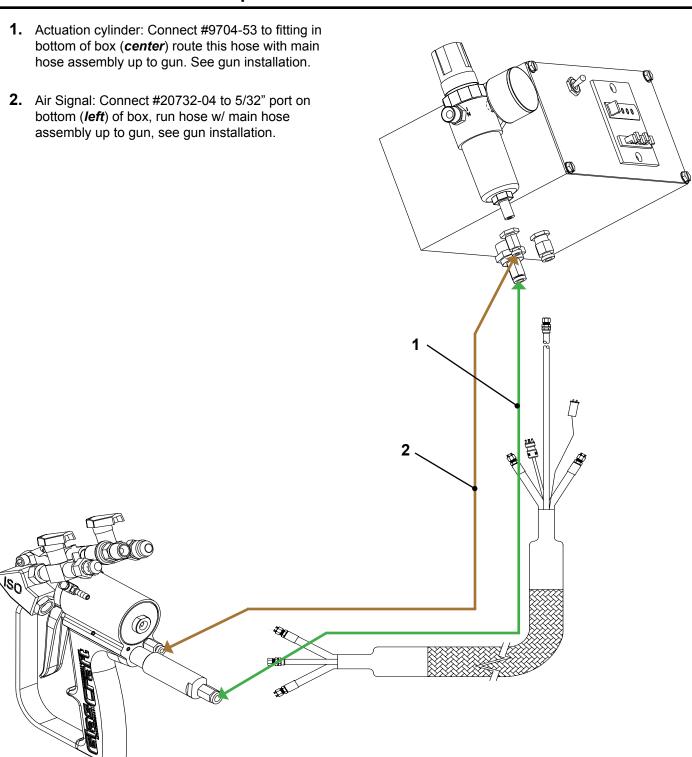


Hydraulic Unit Installation

- **1.** locate lower signal tubing from change over box (Note: this is the 5/32" bulkhead fitting to the inside of the bottom plate)
- **2.** Cut 5/32" line and install #22224-00 tee, install #20732-03 tubing.
- **3.** Remove #22218-00 barb fitting from bottom of control box and install #20796-03 fitting, connect #20732-03 clear tubing from switch tee



Dispense Counter Installation



Operation

START UP DELAYED AIR PURGE

- **1.** Prime system per system manual instructions.
- 2. Set air regulator to 120 psi, this is recommended operation pressure, 90 psi is minimum recommended set point.
- **3.** Push slide valve to the "ON" position on the gun, air purge should be on.
- 4. Trigger Gun and hold
 - **a.** The "Red eye" on the control box face should pull "off"
- 5. Release gun trigger
 - **a.** Air purge should not be present & "red eye" "off" for 2 seconds
- **6.** Air purge will resume and "red eye" be "on"

NOTE

The air purge requires at least 1 second of trigger "on" to fully engage the delay spool & deactivate the air purge.

START UP PNEUMATIC COUNTER

- 1. Prime system per manual instructions
- **2.** Set air regulator to 100 psi, this is recommended operation pressure, 90 psi is minimum recommended set point.
- Depress and hold set button (to left of counter face) depress each corresponding push button to set cycle count
 - **a.** I.E. 00015 = 15 pump cycles
- **4.** It is recommended to test spray system before activating the timer box. During initial start up leave Timer box "on/off" switch to the "off" position.
- **5.** After determining set point of counter, switch unit "on" and begin operation

NOTE

The Timer requires at least 1 second of trigger "on" to fully engage the delay spool & activate the unit.

Not	tes

	Notes
•	
•	
•	
•	
•	
•	
•	
•	

Limited Warranty Policy

GLASCRAFT, INC. ("GlasCraft") warrants to the original Purchaser of GlasCraft manufactured equipment and parts, that all GlasCraft manufactured equipment and parts will conform to their published written specifications and be free of defects in workmanship and material for a period of one (1) year from the original date of installation. GlasCraft makes no warranty to anyone other than the original Purchaser.

If any GlasCraft manufactured part or equipment is found to be defective in workmanship or material within the one-year period from the date of installation, as determined solely by GlasCraft, GlasCraft, in its sole discretion, will either repair or replace the defective part or equipment at GlasCraft's cost, including freight charges both ways, or credit or refund the purchase price for the defective equipment or part.

A warranty claim will be honored only when:

- 1. GlasCraft has been informed, in writing, of any such defect in workmanship or material within ten (10) days after discovery by the original Purchaser;
- 2. An official of GlasCraft has issued a return authorization number; and
- 3. The claimed defective equipment or part has been returned to GlasCraft by the original Purchaser, freight prepaid (with proper return authorization number(s) attached), to: GlasCraft, Inc., 5845 West 82nd Street, Suite 102, Indianapolis, IN 46278, U.S.A.

This warranty shall not apply to any equipment or parts that have been altered or repaired by anyone other than GlasCraft or to defects or damage resulting from improper installation, misuse, negligence, accident, or use not specified by GlasCraft. This warranty shall not apply to any equipment where any parts or components were replaced by any parts or components not manufactured or supplied by GlasCraft. The decision by GlasCraft shall be conclusive and binding on Purchaser.

GlasCraft does not warrant that any equipment or parts sold to Purchaser meet or comply with any local, state, federal, or other jurisdiction's regulations or codes. GlasCraft does not warrant that any equipment or part sold to Purchaser, when used individually or in concert with any other part, equipment, device, component or process, does not infringe on any patent rights of any third party. GlasCraft only warrants that it has no specific knowledge of any such infringement.

GlasCraft makes no warranty as to any parts or equipment manufactured by others. Purchaser shall look solely and only to the manufacturer of such parts or equipment with respect to any warranty claims. GlasCraft hereby assigns to Purchaser the original manufacturer's warranties to all such equipment and parts, to the full extent permitted.

THE AFORESAID WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. SPECIFICALLY THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH WARRANTIES ARE SPECIFICALLY DISCLAIMED.

GlasCraft shall not be liable for any loss or expense resulting from damage or accidents caused by improper use or application of materials manufactured or sold by GlasCraft or its distributors or agents.

UNDER NO CIRCUMSTANCES SHALL GLASCRAFT'S LIABILITY EXCEED THE AMOUNT PURCHASER PAID FOR THE CLAIMED DEFECTIVE EQUIPMENT OR PART. UNDER NO CIRCUMSTANCES SHALL GLASCRAFT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR LOST PROFITS.

No action arising from or relating to any goods manufactured by or purchased from GlasCraft may be brought more than one (1) year after the cause of action accrues.

Technical Assistance.....

Thank You for selecting GlasCraft spray equipment

Should you have any questions or need technical assistance, contact your factory authorized GlasCraft distributor.

Distributor:	
Phone:	888 6
Contact:	

For any issues your distributor cannot address, the GlasCraft technical service department is always available to assist you with the operation of your spray equipment. To help our technical representatives expedite your call and better address your questions, please have the following information ready and available when you phone GlasCraft.

* If your questions are not urgent, You can e-mail all correspondence to service@glascraft.com

	For Air Powered Systems:
Model: Serial number:	Air compressor size:CFM generated:
Type of spray gun: Serial number:	Pressure at the system:
	Hydraulic Pneumatic
Is your equipment:	Dynamic fluid pressure:
Single phase: Three phase	ISOPOLY
What is the inbound voltage to your equipment:	Spray gun chamber size:
Temperature setting ISO:	Material being sprayed:
Temperature county to e.	Viscosity: ISO POLY
Temperature setting POLY:	Approximate material temperature:

Temperature setting HOSE:

For Your Reference



Date Purchased Distributor		
 Contact		
Phone		
E-mail		-

GlasCraft manufactures a complete line of polyurethane foam and polyurea coating spray systems. If your application is in-plant or a field contractor - GlasCraft has a system package to meet your requirements.

GUARDIAN - AIR POWERED / A5 & A6 SERIES EQUIPMENT

- . 6000 OR 12000 WATTS OF HEAT
- . 1600, 2200, OR 3000 PRESSURE SET-UPS AVAILABLE

MH, MH II, & MH III HYDRAULIC POWERED SYSTEMS

- . UP TO 45 LBS / MINUTE OUTPUT
- . EXCELLENT PERFORMANCE AND RELIABILITY

GUARDIAN MMH - MOBILE MODULAR HYDRAULIC SYSTEMS

- . SPECIFICALLY DESIGNED FOR ANY TYPE OF SPRAY RIG
- . GIVE COMPLETE UTILIZATION OF FLOOR SPACE IN MOBILE RIG

PROBLER P2 SPRAY GUN

- . IMPINGEMENT MIX / AIR PURGE
- . OPTIONAL NOZZLE FOR SPRAYING STUD WALLS, POURING & STREAM JET

For more information concerning any of these GlasCraft products, contact your local authorized GlasCraft distributor or visit www.glascraft.com

Quality and Performance... GENUINE GLASCRAFT DISPENSING EXCELLENCE



www.glascraft.com

GC-1409 REVISION A.2 5845 WEST 82nd STREET INDIANAPOLIS, INDIANA 46278 U.S.A.

Phone (317) 875-5592 Fax (317) 875-5456 E-Mail sales@glascraft.com